Index of Claims

| <b>Application No</b> |
|-----------------------|
|-----------------------|

10/037,296

Examiner

David A Saunders, PhD

1644

Art Unit

√ Rejected
= Allowed

| 1 | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

| Z | Non-Elected  |
|---|--------------|
| _ | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

Applicant(s)

DAHLBACK ET AL.

| Cla        | aim  |          |                 |          | (            | Djate  | e,                                      |  |          |                 |   | Cla                    | im        | Τ.                                     | 7         | 1                 | 1        | Date     | ;                  |          |          |     | Cla            | im       |          |              |          |          | ate      |                 |          |          | $\neg$   |
|------------|--|----------|-----------------|----------|--------------|--|---|--|----------|-----------------|---|------------------------|-----------|--|-----------|-------------------|----------|----------|--------------------|----------|----------|-----|----------------|----------|----------|--------------|----------|----------|----------|-----------------|----------|----------|----------|
|            |  | 03       | Ň               | 7        | 7            | 1  | را                                      |  |          |                 |   |                        |           | 大                                      | 15        | 4                 |          |          | $\neg$             | Т        | $\top$   |     |                |          |          |              |          |          |          |                 | П        | $\neg$   | ヿ        |
| Final      | Original   | 0        | 12/16/03        | 4000 519 | 읒            | 6/2/105  | O                                       |  |          |                 |   | a                      | Original  | 12 200x                                | જ         | SO/               | 1        | 1        |                    | - 1      | Ì        |     | -e             | Original |          | .            |          |          |          |                 | .        | - 1      | - 1      |
| :          | ij   | 5        | 3               | 3        | ~            | M  | 3                                       |  |          | 1               |   | Final                  | <u>:</u>  | 12                                     | 5         | 1                 | 1        | 1 I      |                    | - 1      |          |     | Final          | rigi     |          |              |          |          | I        |                 |          | - 1      |          |
| -          | 0  | 117/8    | 4               | 5        | ᆉ            | (0   | =                                       | •  |          |                 |   | -                      | Ō         | 14                                     | 137/9     |                   | †        |          |                    | - 1      |          |     | _              | ō        |          |              |          |          | - 1      |                 |          | ı        | - 1      |
|            | 1  | 3        | -               | 7        | -            | 3  | <del>  ~</del>                          | <del>                                     </del> | Н        | -               |   | 22                     | 51        | 13                                     | V         | 4                 | ╁        | -        | -+                 | -        |          |     |                | 101      | _        | Н            |          | -        | -        |                 | $\dashv$ | -        | $\dashv$ |
|            |  |          | Н               | -        | -            | ┢  | ┝                                       | $\vdash$   | Н        |                 |   | 204                    | 52        | 15                                     | =         | 7                 | ╄        | $\vdash$ | $\dashv$           | +        |          |     |                |          |          | _            | Н        | $\dashv$ | -        | -               | +        | ᅱ        |          |
|            | 2  | _        | Н               |          | _            | _  | ⊢                                       |  | _        | -               |   | 13                     | 52        | Ľ,                                     | 7         | 1                 | -        |          | -                  | -+       |          |     |                | 102      | $\vdash$ | $\Box$       | Н        | -        |          | -               | -        | -        |          |
|            | 3  | _        | Н               | _        | <u> </u>     |  | <u> </u>                                | _  | -        |                 |   | 14                     | 53        | 1                                      | 1         | H                 |          | Ш        | $\dashv$           | $\dashv$ |          |     |                | 103      | $\vdash$ |              |          | _        | _        |                 | _        | _        |          |
|            | 4  |          | Ш               |          | <u> </u>     | <u> </u>   | L_                                      | L.   | Ш        |                 |   | 15                     | 54        | 1                                      | 4         | 4                 | _        | Ш        | 4                  | 4        |          |     |                | 104      |          |              | Ш        |          | $\dashv$ |                 | 4        | _        | _        |
| ļ          | 5  |          |                 |          | 匚            | <u> </u>   | _                                       |  | Ш        | Ш               |   | 16                     | 55        | V                                      | 1         | Ш                 |          | Ш        |                    | _        |          |     |                | 105      |          |              |          |          |          |                 |          |          |          |
|            | 6  |          |                 |          | L            | L  | L                                       |  |          |                 |   | 17                     | 56        | V                                      | Ш         | $\perp$           |          |          |                    |          |          |     |                | 106      |          |              |          |          |          |                 |          | $\Box$   |          |
|            | 7  |          |                 |          |              |  |   |  |          |                 |   | 18                     | 57        | 0                                      |           |                   |          |          |                    |          |          |     |                | 107      |          |              |          |          |          |                 |          | $\Box$   | $\Box$   |
|            | 8  |          |                 |          |              |  |   |  |          |                 |   | 23                     | 58        | 1                                      | Ц         | П                 | [        |          | П                  |          |          |     |                | 108      |          |              |          |          |          |                 | $\neg$   |          | П        |
|            | 9  |          |                 |          | Г            |  |   |  | П        |                 |   | 144                    | 59°<br>60 | )                                      | П         | 7                 |          |          |                    | 寸        |          | 1   |                | 109      |          |              |          |          |          |                 | $\neg$   | $\neg$   | ヿ        |
|            | 10   |          |                 |          |              |  | Г                                       |  |          |                 |   | 25                     | 60        |  | 7         | Т                 |          |          |                    | $\neg$   |          |     |                | 110      |          |              |          |          |          |                 | $\neg$   | $\neg$   | ヿ        |
|            | 11   |          |                 |          | Г            |  | Г                                       |  |          | $\neg$          |   |                        | 61        | T                                      | 11        | $\Box$            | 1        | П        | _                  | 7        |          | 1 1 |                | 111      |          | -            |          |          | $\dashv$ |                 | $\neg$   | $\dashv$ | $\dashv$ |
|            | 12   |          |                 | _        | $\vdash$     |  | T                                       | Г  | П        | $\dashv$        |   | 2 b<br>28              | 62        | T                                      | $\dagger$ | T                 | $\vdash$ | Н        | 寸                  | $\dashv$ | $\top$   |     |                | 112      | $\vdash$ | $\vdash$     | Н        |          |          | $\exists$       | -1       | $\dashv$ | $\dashv$ |
|            | 13   |          | Н               |          | $\vdash$     | <del>                                     </del> | $\vdash$                                | $\vdash$   |          | Н               |   | 29                     | 63        | $\vdash$                               | 1         | $\dag \mathbf{t}$ | 1        | $\vdash$ | -+                 | $\dashv$ | +        | 1   |                | 113      | Н        | Н            | $\vdash$ | -        |          |                 | $\dashv$ | $\dashv$ | $\dashv$ |
| <b>—</b>   | 14   | -        | Н               |          | -            | 1  | H                                       |  |          | $\vdash \vdash$ |   | 30                     | 64        | $\vdash$                               | +         | +                 | +        | $\vdash$ | $\dashv$           | $\dashv$ | +        |     | H              | 114      | $\vdash$ | $\vdash$     | $\vdash$ |          | -        | -               | -1       | -+       | $\dashv$ |
| -          | 15   | -        | $\vdash$        |          | $\vdash$     | -  | ├                                       | $\vdash$   |          | $\vdash$        |   | 31                     | 65        | +                                      | +         | H                 | $\vdash$ | Н        | $\dashv$           | +        | -        |     |                | 115      | $\vdash$ | Н            | H        |          | $\dashv$ | $\vdash$        | -        | }        | $\dashv$ |
|            |  | $\vdash$ | Н               |          |              | $\vdash$   | ├                                       | H  | -        | $\vdash$        |   |                        |           | $\vdash$                               | ⊬         | H                 | +        | ┈        | -+                 | $\dashv$ |          |     | $\vdash$       | 110      | $\vdash$ | Н            | $\vdash$ | _        |          | $\vdash$        |          | -1       | $\dashv$ |
| -          | 16   | $\vdash$ | $\vdash$        | <u> </u> | <del> </del> | <u> </u>   | <u> </u>                                | $\vdash$   |          | $\mid - \mid$   |   | 32                     | 66        | 1                                      | #         | ert               |          | Н        | $\dashv$           | $\dashv$ | +        |     | $\vdash$       | 116      | _        | $\vdash$     | -        | _        |          | $\vdash \vdash$ | -        |          | _        |
| -          | 17   | <u> </u> | $\vdash$        | <u> </u> | -            | _  | -                                       | _  | <b>—</b> |                 |   | 33<br>34               | 67        | -                                      | Н.        | $\sqcup$          | 1        | Ш        | _                  | 4        |          |     |                | 117      | Ш        | Щ            | Ш        |          |          | $\sqcup$        | 4        | _        | $\dashv$ |
|            | 18   | _        | L.              |          | _            | _  | <u> </u>                                | <u> </u>   |          | $\Box$          |   | 34                     | 68        | ↓_                                     | Ц_        | Ц                 | _        | Ш        | _                  | 4        |          |     |                | 118      |          |              | Ш        | $\Box$   |          | Ш               | _        | _        | _        |
|            | 19   | Ļ        |                 |          | _            |  | L                                       | _  |          |                 |   | 35                     | 69        |  | F         | 4                 | _        |          |                    |          |          |     |                | 119      |          |              |          |          |          |                 | $\perp$  | ╝        |          |
|            | 20<br>21   | 11-41-1  | 7               | $\vee$   | 1            | 三  | =                                       | 1  |          |                 |   | 27                     | 70        |  |           | $\perp L$         |          |          |                    |          |          |     |                | 120      |          |              |          |          |          |                 |          |          |          |
| 2          | 21   | بد       | 7               | V        | 1/           | Ξ  | Ξ                                       |  |          |                 |   | 36                     | 71        |  | =         | Ц                 |          |          |                    |          |          |     |                | 121      |          |              |          |          |          |                 |          |          |          |
| 3_         | 22   | مه       | <b>\</b>        | V        | 7            | ]=   | =                                       |  |          |                 |   | 3 <b>6</b><br>37<br>38 | 72        |  | -         | 1                 |          |          | П                  |          |          |     |                | 122      |          |              |          |          |          |                 | П        | $\neg$   | $\Box$   |
|            | 238  |          |                 |          |              |  | Γ                                       | П  |          |                 |   | 38                     | 73        |  | =         | 7                 | П        |          |                    |          |          |     |                | 123      |          |              |          |          |          |                 |          | $\neg$   | $\neg$   |
|            | 800<br>100<br>100<br>100<br>100<br>100<br>100<br>100<br>100<br>100 |          |                 |          |              |  |   | П  |          |                 |   | 39<br>40<br>41         | 74        |  | =         | П                 | Т        |          |                    | 寸        | $\neg$   | 1   |                | 124      |          |              |          |          |          |                 |          | 寸        | $\neg$   |
|            | (25)   |          |                 |          |              |  |   |  |          |                 |   | L P                    | 75        |  | =         | 1                 |          | П        |                    | 7        |          | 1   |                | 125      |          |              | _        |          |          | $\vdash$        | $\dashv$ | 一        | $\dashv$ |
|            | <b>76</b> )  |          |                 |          | _            |  |   |  |          | $\Box$          |   | 11                     | 76        | _                                      | =         | =                 | 1        | $\vdash$ | $\neg$             | $\neg$   |          | 1   |                | 126      |          | _            |          |          |          | -               | $\dashv$ | $\dashv$ | $\dashv$ |
|            | 889  |          |                 |          |              |  | _                                       | <del>                                     </del> |          | Н               |   | 77-                    | 液         | 1                                      | 0         | ۴                 | $\vdash$ | 1-       | _                  | +        |          | 1   |                | 127      |          | -            |          |          | $\vdash$ |                 | -        | $\dashv$ | -        |
| -          | 8  | <b>7</b> | N               |          | ├-           | <del> </del>                                     | ╁─                                      | -  |          | $\dashv$        |   |                        | 78.       | 1                                      | 1         | -                 | ╆        | $\vdash$ |                    | $\dashv$ | +        | ١., | -              | 128      |          | -            | Н        | Н        |          | Н               | $\dashv$ | $\dashv$ | -        |
|            | *  | ÷        | 7               | _        | ┝            | -  | $\vdash$                                | -  | -        |                 |   |                        | 79        | ┼                                      | 0         | ├                 | ╀        | $\vdash$ | $\dashv$           | -        |          |     | <u> </u>       | 120      | -        | -            | Н        | -        |          |                 | -        | $\dashv$ | 1        |
|            | (53X   |          | N               | _        |              | <del> </del>                                     | -                                       | -  | -        | Н               |   | <del> </del> -         |           | ╄                                      | -         | -                 | ├        | $\vdash$ |                    | +        |          | 1   |                | 129      | _        | $\vdash$     | $\vdash$ |          | $\Box$   |                 | -        |          |          |
| 10         | P  |          | -/              |          | =            | _  | -                                       | -  | Н        | Н               |   | <b></b>                | 80        | ╀                                      | <u> </u>  | _                 | ├-       | $\vdash$ |                    | 4        | - -      |     |                | 130      | _        |              |          |          |          | Щ               | _        |          | _        |
| 19         | 98   | 40,10    | <b>Y</b>        | ~        | -            | =  | Ξ                                       | _  | Ш        | -               |   |                        | 81        | 1                                      | L.        | <u> </u>          | ╙        |          | _                  | _        |          |     |                | 131      |          |              |          |          |          | Ш               | _        | _        | _        |
|            | 8  | •        | 7               | L.,      | ļ.,          | _  | _                                       | _  |          |                 |   |                        | 82        | _                                      | ļ         | <u> </u>          | _        | $\sqcup$ | _                  | _        | _        |     |                | 132      |          |              | Ш        |          |          |                 | _        |          |          |
| L          | 33   |          |                 | V        | ~            | _  | _                                       |  |          |                 |   |                        | 83        | 1                                      |           |                   | <u> </u> |          |                    |          |          | ]   |                | 133      |          |              |          |          |          |                 |          |          |          |
|            | 34   | Ш        | Ш               | Ц        | V.           | _  | _                                       |  | Ш        | Ш               |   |                        | 84        | $oxed{oxed}$                           | <u></u>   | L                 | _        | Ш        |                    | $\perp$  |          |     |                | 134      |          |              |          |          |          |                 |          |          |          |
| 5          | 35   | Ш        | Ш               | $\perp$  | V,           | =  | ===                                     |  | Ш        | Ш               |   |                        | 85        |  | L         | L                 |          |          |                    |          |          |     |                | 135      |          |              |          |          |          |                 |          |          |          |
| 6          | 36   |          |                 |          | V            | Ξ  | =                                       |  |          |                 |   | 1                      | 86        | L                                      | L         | L                 | $\Box$   |          | $\Box \mathbb{I}$  | T        |          | ]   |                | 136      |          |              |          |          |          |                 |          |          | $\Box$   |
| 7          | 37   |          |                 |          | V            | =  | 1                                       |  |          |                 |   |                        | 87        |  |           |                   |          | П        | $\sqcap$           | $\neg$   |          | }   |                | 137      |          |              |          |          |          |                 |          | $\neg$   | $\neg$   |
| 8          | 38   |          |                 |          | 1            | =  |   |  | П        |                 | į |                        | 88        |  |           |                   | Г        | П        |                    | $\neg$   |          |     |                | 138      |          |              |          |          |          |                 | $\neg$   | $\neg$   | $\neg$   |
| 8          | 39   |          | П               | 1        | V            | $\equiv$   | =                                       |  | П        |                 |   |                        | 89        | T                                      | T         |                   | T        | П        | $\dashv$           | $\dashv$ |          | 1   |                | 139      | $\Box$   | Г            |          | $\Box$   |          | $\vdash$        | $\neg$   | $\dashv$ | $\dashv$ |
| 10         | 40   |          |                 | $\sqcap$ | J            | -  | Ξ                                       |  | П        | $\neg$          | j |                        | 90        | †                                      | 1         | <u> </u>          | T        | Н        | 寸                  | 十        | $\dashv$ | 1   |                | 140      |          | $\vdash$     | $\vdash$ |          |          | Н               | $\dashv$ | $\dashv$ | $\dashv$ |
| 11         | 41   | Н        |                 | $\top$   | J            | =  |   |  | $\vdash$ | -               | i | $\vdash$               | 91        | +                                      |           | $\vdash$          | $\vdash$ |          | $\dashv$           | -+       | +        |     |                | 141      |          | $\vdash$     | $\vdash$ | $\vdash$ | -        | $\vdash$        | $\dashv$ | ᅱ        | $\dashv$ |
| 1/2        | 42   | Н        | Н               | +        | V            | =  | ======================================= |  | $\vdash$ | Н               |   |                        | 92        | +-                                     | -         | $\vdash$          | $\vdash$ | $\vdash$ | $\dashv$           | +        | +        |     |                | 142      |          | $\vdash$     | $\vdash$ | $\vdash$ |          | Н               | $\dashv$ |          | $\dashv$ |
| H <u>~</u> | 48   | -        | Н               | +        | -            |  | -                                       | 1  | $\vdash$ | $\vdash$        |   | $\vdash$               | 93        | +                                      |           | -                 | +-       | $\vdash$ | -                  | $\dashv$ |          |     | $\vdash\vdash$ |          |          | <del> </del> | $\vdash$ |          |          | $\vdash$        | $\dashv$ |          | -        |
| 20         |  | $\vdash$ | $\vdash$        | +        | _            | _  | =                                       | -  |          | $\vdash$        |   | $\vdash \vdash \vdash$ |           | ╁                                      | ├         | $\vdash$          | -        | $\vdash$ | -+                 | $\dashv$ | +        |     |                | 143      | -        | $\vdash$     | Щ        |          | -        | $\vdash$        |          |          | $\dashv$ |
| 21         | 44<br>45   | Н        | $\vdash \vdash$ | +        | 11 11        | =  | ======================================= | -  | $\vdash$ | $\vdash$        |   | $\vdash$               | 94        | +-                                     | ├         | <u> </u>          | -        | $\vdash$ | -                  | -        |          |     | $\vdash$       | 144      | -        | <u> </u>     | Щ        |          |          | Щ               | _        | _        | _        |
| 21         |  | ш        | $\vdash$        | 1        | V            |  | =                                       | $\vdash$   |          | $\dashv$        |   | $\vdash$               | 95        | 1                                      | <b> </b>  | L                 | ⊢        | Ш        |                    |          |          |     | igwdown        | 145      | <u> </u> | L            | Щ        | Щ        |          | Щ               | _        |          | $\perp$  |
| ⊢          | 746  |          |                 |          |              | <u> </u>   | <u> </u>                                | Ш  | Ш        | Ш               |   | <b>  </b>              | 96        | ــــــــــــــــــــــــــــــــــــــ | L_        | L_                | ـــــ    | Ш        | _                  |          |          |     | ш              | 146      | L_       |              | Ш        |          |          |                 |          |          |          |
|            | 47   | 1        |                 | ש        | ~            |  | L                                       | Ш  | Ш        |                 |   |                        | 97        | _                                      | <u></u>   |                   | _        | Ш        | $oldsymbol{\perp}$ |          |          |     | L              | 147      |          |              |          |          |          |                 |          |          |          |
|            | 48   |          | Щ               |          | V            | <u> </u>   | _                                       | Ш  | Ш        |                 |   |                        | 98        |  |           | L                 | 乚        |          |                    |          |          |     |                | 148      |          |              |          |          |          |                 |          | _7       |          |
|            | 春  |          | _]              |          | 0            | V  | _                                       |  |          |                 |   |                        | 99        | L                                      |           |                   | $L^-$    |          |                    | $\Box$   |          |     |                | 149      |          |              |          |          |          |                 |          | $\neg$   | $\Box$   |
| 4          | 50   |          |                 |          | V            | V  | =                                       |  |          |                 |   |                        | 100       |  |           |                   | Π        | П        | $\neg$             | $\neg$   |          |     |                | 150      |          |              |          |          |          |                 | $\neg$   | ヿ        | $\neg$   |
|            |  |          |                 |          |              |  |   |  |          |                 |   |                        |           |  | _         |                   | •        |          |                    |          |          | •   |                |          |          | _            |          | بب       |          |                 | _        |          | —        |